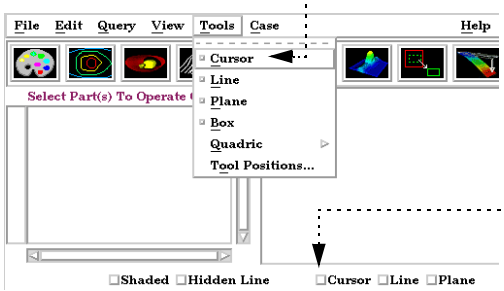
Use the Cursor (Point) Tool

Introduction

EnSight provides a 3D point specification tool called the “Cursor” tool. When visible, the Cursor appears as a 3D cross colored red (X axis), green (Y axis), and blue (Z axis). The Cursor tool is used to supply EnSight with point information, for example to specify the location for a query or the starting point for a particle trace.

Basic Operation

In many cases, the Cursor tool will automatically turn on when performing some function that requires it. You can also turn the tool on and off manually by toggling the Cursor entry in the Tools menu or by clicking the Cursor toggle on the Desktop.

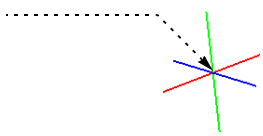


The Cursor tool can be placed in three ways: interactively through direct manipulation with the mouse, by positioning the mouse pointer over a part and pressing the ‘p’ key, or precisely positioned by typing coordinates into a dialog.

To position the Cursor with the mouse:

1. **Place the mouse pointer over the center of the tool.**
2. **Click (and hold) the left mouse button.**
3. **Drag the Cursor to the desired location.**
4. **Release the mouse button.**

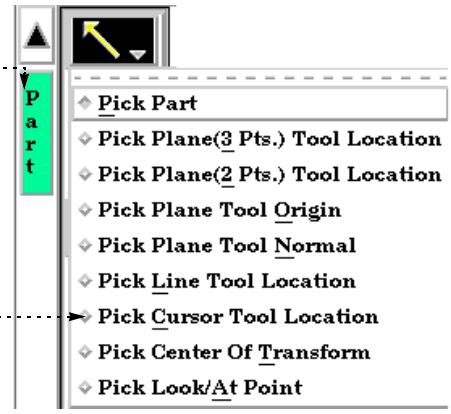
(Undo/Redo button at the bottom of screen can be used to undo/redo the tool transformation)



Cursor translation is restricted to the plane perpendicular to your line of sight. If you need to move the cursor in another plane, rotate the model such that the desired translation plane is perpendicular to your new line of sight. (Note that the Cursor will not exactly track the location of the mouse pointer.)

To position the Cursor on a part with the ‘p’ key:

1. **Click the Part mode button.**
2. **Click the Pick Pull-down and select “Pick Cursor Location” from the pop-up menu.**
3. **Place the mouse pointer over the desired location on a part in the graphics window and press the ‘p’ key.**



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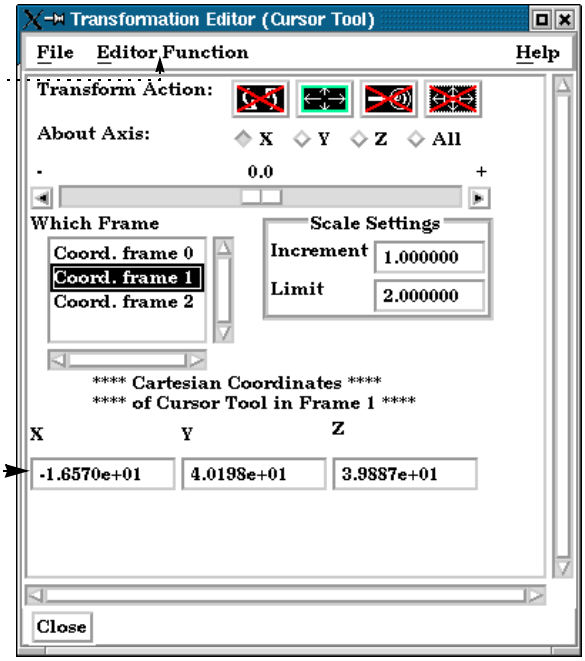
To set the Cursor by specifying coordinates:

1. **Open the Transformation Editor dialog by clicking Transf. Edit... on the desktop.**
2. **Select Editor Function > Tools > Cursor.**
3. **Enter the desired coordinates into the X, Y, and Z type-ins and hit return.**



You can also move the Cursor by setting the desired axis of translation in the Axis pop-up and manipulating the slider bar. In this case, the values in the “Scale Settings” section control the sensitivity and limit of the slider action.

Note that you can also use this dialog to view (rather than set) the position of the Cursor since the X,Y,Z numeric values always update to reflect the current location. If you are positioning the Cursor interactively with the mouse, the values will update when the mouse button is released.

Advanced Usage

After a model has been loaded, the initial location of the Cursor is set to the “look-at” point – the geometric center of all visible geometry. The coordinates of the Cursor are specified with respect to the default frame: frame 0. However, if you have created additional **frames**, you can position the Cursor relative to the origin of a different frame. This is accomplished by selecting the desired frame in the “Which Frame” list in the Transformation Editor dialog.

You can easily reset the position of the Cursor tool to the default. See **How To Reset Tools and Viewports** for more information.

Positioning a 3D tool with a 2D device (the mouse) can be difficult. Multiple **viewports** are sometimes helpful in positioning tools since you can see the tool simultaneously from multiple vantage points.

See Also

Other tools: **Line**, **Plane**, **Box, Cylinder**, **Sphere**, **Cone**, **Surface of Revolution**. See the How To article on **Frames** for additional information on how frames effect tools.

User Manual: **Tools Menu Functions**